

PROPOSAL EVALUATION

Proposition 84 Integrated Regional Water Management (IRWM) Grant Program

Implementation Grant, Round 1, FY 2010-2011

Applicant	San Luis and Delta Mendota Water Authority	Amount Requested	\$ 12,443,653
Proposal Title	Westside-San Joaquin Implementation Grant Application	Total Proposal Cost	\$ 16,808,734

PROPOSAL SUMMARY

Four projects are included in the proposal: (1) City of Firebaugh Well Replacement Project, (2) City of San Joaquin Water Meter Installation Project, (3) City of Tracy Recycled Water Distribution System Project, and (4) West Stanislaus Water District and Del Puerto Water District Water Supply Enhancement Project.

PROPOSAL SCORE

Criteria	Score/ Points Possible	Criteria	Score/ Points Possible
Work Plan	9/15	Economic Analysis – Water Supply Costs and Benefits	6/15
Budget	3/5	Water Quality and Other Expected Benefits	6/15
Schedule	5/5	Economic Analysis – Flood Damage Reduction	0/15
Monitoring, Assessment, and Performance Measures	3/5	Program Preferences	10/10
Total Score (max. possible = 85)			42

EVALUATION SUMMARY

The following is a review summary of the proposal.

Work Plan

The scoring criterion is less than fully addressed by the proposal, and supporting documentation is insufficient. The work plan does not adequately address how the proposal relates to the Westside Integrated Water Resources Plan (Plan) goals and objectives. The only synergies and linkages identified is that two of the four projects will transport recycled water that can be used to offset surface and groundwater demand. Although the project tasks likely result in completed projects, the level of detail for Projects 1, 2, and 3 is lacking. For example, Project 3, tasks 6 and 7 are not defined at this time, and tasks 8-11 are primarily budget assumptions. The proposal does not provide a number of supporting documents. The Appendix that is referenced to support Project 3, and the 75% plans referred to in Project 4 are not included in the application. Projects 1 and 2 do not provide any supporting documents. The proposal lacks the technical information to assess the feasibility of Project 3. The project goal is to assist in the City's 20%

water use reduction goals, as mandated by SBX7 7, but the sports complex water demands are not existing demands.

Budget

The budgets for most of the projects in the Proposal have detailed cost information, but the supporting documentation is lacking for a majority of the items shown in the budget categories. The budgets for Projects 1, 2, and 4 generally agree with the work plans and schedules. The budget categories are inserted in the work plan tasks. Project 1 does not provide any budget detail or supporting documentation. The costs appear to be reasonable. Project 3 does not provide any detailed budget information in the budget section, or any supporting documentation to justify the costs. There is some discussion about the task budgets in the work plan, but there is no correlation between the work plan task narratives and the budget table. There are inconsistencies in the supporting documentation for Project 4, and there are some discrepancies between the Project 4 backup documentation figures and the project budget table. For example, operation and maintenance (O&M) costs are included in supporting documentation, but it is not clear how it was accounted for in the budget table. Also, the engineering services and the construction backup estimates do not match with the budget category. No supporting documentation is provided for the fish screen project.

Schedule

The schedule is consistent and reasonable and demonstrates a readiness to begin construction or implementation of at least one project of the Proposal no later than six months (December 1, 2011) after the anticipated award date (June, 1, 2011).

Monitoring, Assessment, and Performance Measures

The criterion is less than fully addressed and documentation is incomplete. The proposal does not address consistency with the Basin Plan, and there is no "Project Performance Measures Table" for Project 4. Outcome indicators are adequate to evaluate change resulting from the proposal's projects (water quality improvement, increase in water supply reliability and water conservation). Water supply reliability and water quality improvement should be apparent after completion of Project 1, but the increase in water supplies and conservation will take time with the other projects. The sports complex that will receive the recycled water in Project 3 will be constructed in phases as funding allows. The Proposal claims anticipated first demands of about 20% to begin in 2013. The building schedule allows for an additional 20% annually, with build out of the complex occurring in five years.

Economic Analysis – Water Supply Costs and Benefits

Only average levels of water supply benefits can be realized through this proposal; however, the quality of the analysis is partially lacking and supporting documentation is partially substantiated. Problems noted below include lack of justification and backup information for many of the benefit estimates. Four projects provide quantified benefits.

Project 1 would replace an existing city drinking water well which has high arsenic. The applicant states "The well is not expected to produce more water than the existing well, nor ... for new or planned growth." Based on this statement, benefits are water quality. The well is also stated to have high maintenance cost and declining yield, so it does provide water supply benefits. Only the grant requested costs of \$665,000

are shown, not the total of \$805,000. What appears to be the total capital cost is shown in Table 11 as an annual recurring cost. Benefits are adequately described in both Attachments 7 and 8, but not quantified.

Project 2 proposes to install 640 meters on residences. Benefits are water supply, resulting from an assumed 20% reduction in water use after installation, and water quality due to the same 20% savings in wastewater flow and treatment costs. Reviewer is unable to find where the application presents evidence supporting the assumed savings, but it is consistent with assumptions used by CUWCC and others. Costs in Attachment 7 are escalated for inflation, despite PSP instructions to use 2009 \$. Water supply benefits are calculated by multiplying the assumed savings by the total average water utility costs per mg produced. Fixed costs that do not vary with water used should have been excluded from the calculation (or at least explained why they might be appropriate to include). No supporting data is shown.

Project 3 has two phases, and funding is requested for the first. Phase 1 would build a recycled water distribution system to a sports field complex. Phase 2 would extend the distribution system a substantially longer distance to serve another part of the City. Costs are escalated for inflation, despite PSP instructions to use 2009 \$. Grand total construction cost does not match the number in Budget Table 7 (possibly due to escalating for inflation). Costs and benefits are shown for both phases. Benefits are estimated as the avoided cost of another supply and the avoided wastewater discharge cost. Values in the benefit tables are simply total dollars per year, and do not reference any yield estimate elsewhere in the application. Therefore, it is difficult to assess the magnitude of quantified benefits. All benefits are also escalated for inflation. The avoided supply benefits for Phase 2 appear to be over-estimated.

Project 4 would bring San Joaquin River water or eastside recycled water to the DMC via an intertie (Element I) with the WSID main canal. Project would also construct a fish screen at the WSID intake (Element II). Benefits are primarily water supply, but also ecosystem benefits from the fish screen. Avoided wastewater management costs could be a benefit to the eastside if that were the source of some water, but these have not been quantified. Unlike the other projects in this proposal, costs are not escalated for inflation, and are shown in 2009 \$. Construction costs match numbers in Table 7, replacement costs are shown where needed. Total PV of costs is \$139.96 million for Element 1, and \$1.94 million for Element 2 (the fish screen). Benefits are estimated as: 1) the avoided cost of other water supply using an assumed cost of \$200 per AF; and 2) the avoided cost of upgrading 2 pump stations. These assumptions seem reasonable, but the reviewer could find no explanation provided in Attachment 7. Total claimed PV of benefits \$157.49 million.

Water Quality and Other Expected Benefits

Only average levels of water quality and other benefits can be realized through this proposal; however, the quality of the analysis is partially lacking and supporting documentation is partially substantiated. Benefit estimates are not calculated as required, and the basis for the avoided waste water treatment plant (WWTP) cost is not documented.

Water quality benefits for Project 2 are estimated as WWTP savings. These avoided costs are escalated based on inflation in salaries, benefits, etc. – (PSP instructions were to use dollar values in 2009, without inflation). No evidence is provided in Attachment 8 for the unit savings of \$2,731 per mg.

Project 4 includes a short, general discussion of potential benefits to fisheries in the San Joaquin River (SJR). A described link to potential Delta water quality benefits, by reducing demands for water supply from the Delta, is tenuous – no evidence is provided that the project would actually reduce demands for Delta water.

The mechanism by which some other project using eastside cities' recycled water could avoid costs is briefly explained. It is unclear if the alternative project would in fact be built.

Economic Analysis – Flood Damage Reduction

No flood damage reduction benefit is claimed.

Program Preferences

The Proposal includes four projects that collectively will implement ten Program Preferences including: Include regional projects or programs, Effectively integrate water management programs and projects within hydrologic region, Effectively resolve significant water-related conflicts within or between regions, Contribute to attainment of one or more of the objectives of the CALFED Bay-Delta Program, Address critical water supply or water quality needs of disadvantaged communities within the region, Effectively integrate water management with land use planning, Drought preparedness, Use and reuse water more efficiently, Protect surface water and groundwater quality, and Ensure equitable distribution of benefits. The applicant adequately documents the magnitude and breadth of these program preferences and demonstrates with a high degree of certainty that if implemented, the Proposal will meet these preferences.